

College of Education and Human Development Division of Special Education and disAbility Research

Fall 2015

EDSE 841 001: Intervention Research in Special Education CRN: 71907, 3 - Credits

Instructor: Dr. Sheri Berkeley	Meeting Dates: 08/31/15 - 12/21/15
Phone: 703-993-9689	Meeting Day(s): Monday
E-Mail: <u>sberkele@gmu.edu</u> (best contact)	Meeting Time(s): 4:30 pm-7:10 pm
Office Hours: by appointment	Meeting Location: Fairfax Krug Hall 102

Note: This syllabus may change according to class needs. Students will be advised of any changes immediately through George Mason e-mail and/or through Blackboard.

Course Description

Provides advanced graduate students with opportunities for in-depth study, analysis, and discussion of original intervention research in special education. Emphasizes analyzing research methodology, coding original intervention research, analyzing results, synthesizing findings, formulating future research questions relevant to individuals with disabilities, and gaining an understanding of the submission process for conferences and publications. Prerequisite(s): Admission to PhD in education program, or permission of instructor. Hours of Lecture or Seminar per week: 3 Hours of Lab or Studio per week: 0

Prerequisite(s): Admission to PhD in education program, or permission of instructor

Co-requisite(s): None

Advising Contact Information

Please make sure that you are being advised on a regular basis as to your status and progress through your program. Mason M.Ed. and Certificate students should contact the Special Education Advising Office at (703) 993-3670 for assistance. All other students should refer to their faculty advisor.

Nature of Course Delivery

Learning activities include the following:

- 1. Class lecture and discussion
- 2. Application activities
- 3. Small group activities and assignments
- 4. Video and other media supports
- 5. Research and presentation activities
- 6. Electronic supplements and activities via Blackboard

Learner Outcomes

Upon completion of this course, students will be able to:

- Describe various methodologies used in special education intervention research.
- Demonstrate how to analyze, critique, and synthesize special education intervention research.
- Write syntheses of special education intervention research.
- Describe issues surrounding special education intervention research and identify important intervention researchers.
- Discuss the publication process, including addressing various target audiences and target journals.

Required Textbooks

Lipsey, M. W., & Wilson, D. B. (2001). Practical meta-analysis. Applied social research methods series (Volume 49). Thousand Oaks, CA: Sage.

American Psychological Association. (2010). Publication manual of the American Psychological

Association (6th ed.). Washington, DC: Author.

****The Digital Library is not required for this course.****

Digital Library

Effective summer 2015, the Division of Special Education and disAbility Research will discontinue the use of the Pearson Digital Library. No further registrations will be accepted. Students who hold current subscriptions will continue to have access to the library for the remainder of their subscription time. However, no further updates will be made to the digital library. During this time, should a textbook be revised or a new book is adopted for a class where the text is included in the digital library, Pearson will have options available to you and will provide you with an individual e-text or, if there is no e-text, a printed copy. Students, who have purchased a 3-year subscription directly through Pearson Education, will also have an option to obtain a prorated refund. However, 3-year subscription access cards purchased via the GMU bookstore will need to speak with a George Mason Bookstore Representative. Please be aware that the issuance of a refund, in this case, is at the discretion of the George Mason

bookstore. Concerns or questions may be directed to Molly Haines at Molly.Haines@pearson.com.

Additional Required Readings

- Forness, S.R. (2001). Special Education and Related Services: What Have We Learned From Meta-Analysis? *Exceptionality*, *9*, 185-197.
- Gersten, R., Fuchs, L., Compton, D., Coyne, M., Greenwood, C., & Innocenti, M.S. (2005). Quality indicators for group experimental and quasi-experimental research in special education. *Exceptional Children*, *71*, 149-164.
- Horner, R.H., Carr, E.G., Halle, J., McGee, G., Odom, S., & Wolery, M. (2005). The use of single subject research to identify evidenced-based practice in special education. *Exceptional Children*, 71, 165-180.

Kavale, K. A. (2001). Meta-analysis: A primer. Exceptionality, 9, 177-183.

- Mastropieri, M.A., Berkeley, S., McDuffie, K., Graff, H., Marshak, L., Conners, N., Diamond, C.M., Simpkins, P., Bowdey, F. R., Fulcher, A., Scruggs, T.E., & Cuenca-Sanchez, Y. (2009). What is published in the field of special education? An analysis of 11 prominent journals. *Exceptional Children*, *76*, 95-109.
- Odom, S.L., Brantlinger, E., Gersten, R., Horner, R.H., Thompson, B., & Harris, K.R. (2005). Research in special education: Scientific methods and evidence-based practices. *Exceptional Children*, *71*, 137-148.
- Parker, R. I., Vannest, K. J., & Davis, J. L. (2011). Effect size in single-case research: A review of nine nonoverlap techniques. *Behavior Modification*, *35*, 303-322.
- Scruggs, T.E. & Mastropieri, M.A. (1987). The quantitative synthesis of single-subject research: Methodology and validation. *Remedial & Special Education*, *8*, 24-33.
- Scruggs, T. E., & Mastropieri, M. A. (2013). PND at 25: Past, present, and future trends in summarizing single-subject research. *Remedial & Special Education*, *34*, 9-19.

Required Resources

Blackboard will be used to post important information for this course. Announcements and resources are posted on the Blackboard site in between class sessions. You are responsible for accessing the materials (for printed copies, etc.) prior to class. In addition, <u>you will need to login to Blackboard to upload assignments for the course</u>.

Access Blackboard through **myMason**:

- →Go to the GMU homepage: <u>http://www.gmu.edu/</u>
- \rightarrow Click on MyMason on the top of the page.
- →Enter your user login and password (the same as your GMU email login and password)
- \rightarrow Click the "Courses" tab at the top of the screen
- \rightarrow Select your course from the middle column.

Recommended Readings

- Cooper & Hedges, L. V. (Eds.). (1994). *The handbook of research synthesis*. New York: Russell Sage Foundation.
- Glass, G. V. (1976). Primary, secondary and meta-analysis of research. *Educational Researcher*, *5*, 3-8.
- Hedges, L. V., & Olkin, I. (1985). *Statistical methods for meta-analysis*. Orlando, FL: Academic press.
- Hunter, J. E., & Schmidt, F. L. (1990). *Methods of meta-analysis: Correcting error and bias in research findings*. Newbury Park, CA: Sage.
- Lessen, E., Dudzinski, M, Karsh, K., & Van Acker, R. (1989). A survey of ten years of academic intervention research with learning disabled students: Implications for research and practice. *Learning Disabilities Focus*, *4*, 106-122.
- Rosenthal, R. (1991). *Meta-analytic procedures for social research. Applied social research methods series (vol. 6).* Thousand Oaks, CA. Sage.
- Sharpe, D. (1997). Of apples and oranges, file drawers and garbage: Why validity issues in metaanalysis will not go away. *Clinical Psychology Review*, 17, 881-901.
- What Works Clearinghouse. (2013). What works clearinghouse: Procedures and standards handbook (version 3.0). Retrieved from: http://ies.ed.gov/ncee/wwc/pdf/reference_resources/wwc_procedures_v3_0_draft_standar ds_handbook.pdf

Course Relationships to Program Goals and Professional Organizations

This course is part of the George Mason University, Graduate School of Education (GSE), Special Education Program for teacher licensure in the Commonwealth of Virginia in the special education areas of Special Education: Students with Disabilities who Access the General Curriculum K-12. This program complies with the standards for teacher licensure established by the Council for Exceptional Children (CEC), the major special education professional organization.

GMU Policies and Resources for Students:

a. Students must adhere to the guidelines of the George Mason University Honor Code [See http://oai.gmu.edu/the-mason-honor-code/].

b. Students must follow the university policy for Responsible Use of Computing [See <u>http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/</u>].

c. Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.

d. The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See <u>http://caps.gmu.edu/]</u>.

e. Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See <u>http://ods.gmu.edu/</u>].

f. Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.

g. The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See <u>http://writingcenter.gmu.edu/</u>].

Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times.

Core Values Commitment

The College of Education & Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles. [See <u>http://cehd.gmu.edu/values/</u>]

For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See <u>http://gse.gmu.edu/</u>]

Course Policies & Expectations

Attendance.

Students are asked to attend all classes on time, be prepared, post to Blackboard discussion board, and actively participate and support the members of the class learning community.

Late Work.

Late will not be accepted.

****There is no required performance-based assessment for this course.**** Blackboard Submission

Every student registered for any Special Education course with a required performance-based assessment is required to submit this assessment, (*NO ASSESSMENT REQUIRED FOR THIS* <u>COURSE</u>) to Blackboard (regardless of whether a course is an elective, a onetime course or part of an undergraduate minor). Evaluation of the performance based assessment by the course instructor will also be completed in Blackboard. Failure to submit the assessment to Blackboard

will result in the course instructor reporting the course grade as Incomplete (IN). Unless the IN grade is changed upon completion of the required Blackboard submission, the IN will convert to an F nine weeks into the following semester.

Grading Scale

A = 90-100%

- B = 80-89%
- C = 70-79%
- F = <79%

Evaluation will be based upon a point system. The point value for each assignment is as follows:

Classroom Participation & Blackboard Posts	30
Final Paper	50
Project Presentation or Final Exam	
TOTAL POINTS	

Assignments

Performance-based Assessment (Blackboard submission required).

N/A for this course.

Performance-based Common Assignments (No Blackboard submission required).

N/A for this course.

Other Assignments.

Participation & Homework (30 points)

Students are asked to attend all classes on time, be prepared, and actively participate and support the members of the class learning community. This includes being prepared for and actively participating in discussions and class activities, and submitting homework (HW) that is complete and on-time. *Specific guidance for the content of HW will be provided by the instructor*.

Note: In some instances, a class absence is unavoidable. However, course activities are group based and are dependent upon your presence to be meaningful to both you and your classmates. Therefore, a HW submission without your presence will only be allowed on one occasion in the course.

Rubric for Participation

- **Exemplary (30):** The student attends all or almost all classes (student may miss one class with notice to instructor), is always on time, and is prepared (including posting HW on time to Blackboard even if absent); and the student actively participates and supports the members of their learning group and the class.
- Adequate (25): The student is usually on time, usually prepared for class, and participates in group and class discussions, but may miss participation points due to

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multiple absences (two absences) and/or failure to prepare for a class activity (including posting HW to Blackboard on time).

- **Marginal (20):** The student is often late for class and/or misses numerous participation opportunities due to absences (3 or more) or failure to prepare for two class activities (including posting HW to Blackboard on time).
- **Inadequate (0 -15 points):** The student is frequently late for class. Student misses numerous participation opportunities due to absence (3 or more) or fails to prepare for three or more class activities. Instructor is not notified of absences. The student does not actively participate in discussions. The student may fail to exhibit professional behavior and dispositions. **Excessive absences can result in additional penalties and potential withdrawal from class.**

Final Paper (50 points)

(Performance Based Assessment)

Students will conduct a systematic review on a topic of their choice and write up findings in manuscript form. The manuscript will contain (a) introduction, (b) methods, (c) results (including a literature table), (d) discussion, and (e) references. Refer to the APA manual for how to format headings and citations appropriately.

Introduction

- Brief introduction to the topic & literature review.
- Statement of purpose and research questions.

Methods

- Search Procedures
- o Inclusion/Exclusion Criteria
- o Coding Conventions & Procedures

Results

- o Overview of studies located through systematic search
- Overall findings organized in a meaningful way for the reader
- A literature table of reviewed studies that highlights important study characteristics and outcomes.

Discussion

- Summary of important results, discussion of how findings add to existing literature base, and implications for the future research and practice
- Discussion points should connect to findings in the analysis

References

- References should be listed in APA format.
- Studies included in the review should be noted with an asterisk.

Rubric for Final Paper

Exemplary paper (A):

Effective syntheses contain the following:

• An introduction that establishes an important educational problem that needs to be addressed, a logical presentation of information that leads to the purpose statement of the paper (in this case a systematic literature review or meta-analysis). Important concepts are defined in this section as well as any background information needed to support search procedures in the methodology.

- A method section that has clearly replicable procedures and demonstrates competency in the search techniques learned in class (search of educational data bases with key terms, ancestry and/or descendent searches, hand searches of relevant journals), and identifies clear and reasonable decision making criteria for individual studies included in the review (inclusion/exclusion criteria).
- A results section that provides an overview of the characteristics of the data set, is logically organized for the reader, demonstrates that search procedures described in the method section were consistently followed, and succinctly and sufficiently describes relevant information from each of the studies reviewed. A visual representation of the findings (i.e., a literature table) with accurate information helps the reader to understand more thoroughly the research reviewed.
- A discussion section that provides a thoughtful and analytical discussion of findings and is based firmly on studies reviewed (not solely the authors opinion), and references implications for practice where appropriate.
- **Overall** student understanding of the purpose of each of these sections of a research paper, a professional writing style (has been thoroughly edited), and citations that are in APA format (with careful attention to 'glaring' errors).

Adequate paper (B):

Good overall paper, lacking in one or two of the criteria for an exemplary paper. Not entirely reflective or thoughtful, or minor writing style or APA format errors may be present.

Inadequate paper (C): Overall, acceptable but with multiple significant problems. Contains some useful information, but may have substantial problems with evaluation, writing style or APA format, or unclear or inappropriate description of implementation of project. May have substantial problems in important areas such as writing, proposed implementation of intervention, procedures for evaluation of results, or overall thoughtfulness.

Unacceptable/no paper (0 points): Paper with no value whatsoever relative to the assignment, or no paper turned in at all. May describe a project of no value that was not approved for this assignment.

Project Presentations OR Final Exam (20 points)

Final Exam: The final exam will consist of the critical concepts from the course—including assigned readings, lectures, and class discussions. The format will include multiple choice, essay, and application items.

Project Presentations: Students who locate 10 or more studies that meet their systematic review criteria will have the option to extend their final papers by calculating effect sizes (group studies) or non-overlap indices (single case studies), and re-interpreting the overall findings. Findings will be presented in a poster session format. In addition:

- Be prepared to explain clearly your search procedures and findings, and to answer questions about your project.
- Prepare visual materials use in your presentation refer to the AERA Poster Session Guidelines document on class Blackboard site.
- Prepare a one-page summary hand-out for your audience and the instructor.

Schedule TENTATIVE CLASS SCHEDULE:

Class	Торіс	Readings	Due
Class 1 8/31	 Course Overview Intervention Research in Special Education 	 Mastropieri et al. (2009) Odom et al. (2005) 	
9/7	NO CLASS		
Class 2 9/14	• Single Subject Research in Special Education	• Horner et al. (2005)	• HW 1: locate intervention studies: single-case designs
Class 3 9/21	• Group Research in Special Education	• Gersten et al. (2005)	• HW 2: locate intervention studies: group designs
Class 4 9/28	 Introduction to Systematic Synthesis of Research <u>Step 1</u>: Formulating the Problem 	• Lipsey & Wilson (2001): Chapters 1	• HW 3: locate research syntheses
Class 5 10/5	Library Orientation	• Forness et al. (2001)	• HW 4: Project Rationale & Research Questions
Class 6 10/13 TUESDAY	 <u>Step 2</u>: Searching the Literature <u>Step 3</u>: Gathering Information from Studies 	• Lipsey & Wilson (2001): Chapters 2	• HW 5: Data base search results
Class 7 10/19	 <u>Step 4</u>: Evaluating the Quality of Studies Developing a Coding Scheme and Coding Study Reports 	• Lipsey & Wilson (2001): Chapter 4	• HW 6: Inclusion/Exclusion Criteria
Class 8 10/26	Data Management	• Lipsey & Wilson (2001): Chapter 5	HW 7: Coding Manual & coded articles
Class 9 11/2 Class 10 11/9	 Writing the Methods Section <u>Step 5</u>: Analyzing and Integrating the Outcomes of Studies <u>Step 6</u>: Interpreting the Evidence <u>Step 7</u>: Presenting the Results 		HW 8: Coding Manual Revisions HW 9: Method section DRAFT

Class 11 11/16	• Coding Outcome Variables in Single Subject Research	 Scruggs & Mastropieri (1987) Scruggs & Mastropieri (2013) Parker et al. (2011) 	• HW 10: Literature table DRAFT
Class 12 11/23	• Selecting, Computing, and Coding the Effect Size Statistic	 Lipsey & Wilson (2001): Chapter 3 Kavale (2001) 	
Class 13 11/30	 Analysis Issues Computational Techniques for Meta- analytic Data 	• Lipsey & Wilson (2001): Chapter 6, 7, & 8	• Final Paper
Class 14 12/7	 FINAL PRESENTATIONS Dissemination of Research Findings 		• Presentation (option 1 for students who meet criteria)
12/14	• FINAL EXAM		• Final Exam (option 2)

NOTE: This syllabus may change according to class needs.

Appendix